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10/670,078

09/23/2003

Jack Steenstra

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05/20/2005

Qualcomm Incorporated
Patents Department
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EXAMINER

WEST, LEWIS G

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,078

Applicant(s)

STEENSTRA ET AL.

Examiner

Lewis G. West

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because there are lines which appear to be arrows or lead lines between figures 1, 2, and 3 that appear to be used in reference to all 3 figures, and it is further unclear from the drawings which items belong with which figure number. Figure should be appropriately separated to avoid confusion. See 37 CFR 1.184 sections (q) and (r) below. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

37 CFR 1.184 (q) Lead lines.

Lead lines are those lines between the reference characters and the details referred to. Such lines may be straight or curved and should be as short as possible. They must originate in the immediate proximity of the reference character and extend to the feature indicated. Lead lines must not cross each other. Lead lines are required for each reference character except for those which indicate the surface or cross section on which they are placed. Such a reference character must be underlined to make it clear that a lead line has not been left out by mistake. Lead lines must be executed in the same way as lines in the drawing. See paragraph (l) of this section.

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37 CFR 1.184 (r) Arrows.

Arrows may be used at the ends of lines, provided that their meaning is clear, as follows:

- (1) On a lead line, a freestanding arrow to indicate the entire section towards which it points;
- (2) On a lead line, an arrow touching a line to indicate the surface shown by the line looking along the direction of the arrow; or
- (3) To show the direction of movement.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Shin (US 6,006,109).

Regarding claim 1, Shin discloses apparatus for use in a first device to receive digital data from a second device, the apparatus comprising: a jack configured to receive analog signals encoded with the digital data; and a conversion unit coupled to the jack and configured to recover the digital data from the analog signals. (Col. 3 lines 31-55)

Regarding claim 2, Shin discloses the apparatus of claim 1, further comprising: a non-wireless communication device configured to couple with the jack, the non-wireless communication device configured to carry the analog signals encoded with digital data to the first device using the jack. (Col. 3 lines 31-55)

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Regarding claim 3, Shin discloses the apparatus of claim 2, wherein the non-wireless communication device comprises: a non-wireless medium having a first end and a second end; a first plug coupled to said first end and configured to couple to the jack; and a second plug coupled to said second end and configured to couple to a jack of the second device. (Col. 3 lines 31-55)

Regarding claim 4, Shin discloses the apparatus of claim 1, wherein the jack is configured to couple to either one of a headphone or a headset. (Col. 5 lines 13-25)

Regarding claim 5, Shin discloses the apparatus of claim 4, wherein the jack is configured to receive perceptible sound. (Col. 3 lines 31-55)

Regarding claim 6, Shin discloses a method for use in a first device to receive digital data from a second device, the method comprising: receiving analog signals encoded with the digital data using a jack; and recovering the digital data from the analog signals. (Col. 3 lines 31-55)

Regarding claim 7, Shin discloses the method of claim 6, further comprising: coupling a non-wireless communication device to the jack; and receiving the analog signals through the non-wireless communication device. (Col. 3 lines 31-55)

Regarding claim 8, Shin discloses the method of claim 7, wherein receiving the analog signals comprises: receiving the analog signals as audible analog signals. (Col. 3 lines 31-55)

Regarding claim 9, Shin discloses the method of claim 7, wherein receiving the analog signals comprises: receiving the analog signals electronically. (Col. 3 lines 31-55)

Regarding claim 10, Shin discloses the method of claim 6, further comprising: receiving perceptible sound using the jack. (Col. 3 lines 31-55)

Regarding claim 11, Shin discloses apparatus for use in a first device to transmit digital data to a second device, the apparatus comprising: a conversion unit configured to encode the digital data into analog signals; and a jack coupled to the conversion unit and configured to transmit the analog signals encoded with digital data. (Col. 3 lines 31-55)

Regarding claim 12 Shin discloses, the apparatus of claim 11, further comprising: a non-wireless communication device configured to couple with the jack, the non-wireless communication device configured to carry the analog signals encoded with digital data from the first device using the jack. (Col. 3 lines 31-55)

Regarding claim 13, Shin discloses the apparatus of claim 12, wherein the non-wireless communication device comprises: a non-wireless medium having a first end and a second end; a first plug coupled to said first end and configured to couple to the jack; and a second plug coupled to said second end and configured to couple to a jack of the second device. (Col. 3 lines 31-55)

Regarding claim 14, Shin discloses the apparatus of claim 11, wherein the jack is configured to couple to either one of a headphone or a headset. (Col. 5 lines 13-25)

Regarding claim 15, Shin discloses the apparatus of claim 14, wherein the jack is configured to output perceptible sound. (Col. 3 lines 31-55)

Regarding claim 16, Shin discloses method for use in a first device to transmit digital data to a second device comprising: encoding the digital data into analog signals; and transmitting the analog signals encoded with digital data using a jack. (Col. 3 lines 31-55)

Regarding claim 17, Shin discloses the method of claim 16, further comprising: coupling a non-wireless communication device to the jack; and transmitting the analog signals through the non-wireless communication device. (Col. 3 lines 31-55)

Regarding claim 18, Shin discloses the method of claim 17, wherein transmitting the analog signals comprises: transmitting the analog signals as audible analog signals. (Col. 3 lines 31-55)

Regarding claim 19, Shin discloses the method of claim 17, wherein transmitting the analog signals comprises: transmitting the analog signals electronically. (Col. 3 lines 31-55)

Regarding claim 20, Shin discloses the method of claim 16, further comprising: outputting perceptible sound using the jack. (Col. 3 lines 31-55)

Regarding claim 21, Shin discloses apparatus for use in a first device to receive digital data from a second device, the apparatus comprising: means for receiving through a jack analog signals encoded with the digital data; and means for recovering the digital data from the analog signals. (Col. 3 lines 31-55)

Regarding claim 22, Shin discloses the apparatus of claim 21, further comprising: a non-wireless means for carrying the analog signals encoded with digital data to the first device using the jack. (Col. 3 lines 31-55)

Regarding claim 23, Shin discloses apparatus for use in a first device to transmit digital data to a second device, the apparatus comprising: means for encoding digital data into analog

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signals; and means for transmitting through a jack the analog signals encoded with digital data.

(Col. 3 lines 31-55)

Regarding claim 24, Shin discloses the apparatus of claim 23, further comprising: non-wireless means for carrying the analog signals encoded with digital data from the first device to the second device using the jack. (Col. 3 lines 31-55)

Regarding claim 25, Shin discloses apparatus for use in a first device to communicate digital data with a second device, the apparatus comprising: means for receiving incoming analog signals encoded with digital data from the second device; means for transmitting outgoing analog signals encoded with digital data to the second device; means for encoding digital data into the outgoing analog signals; and means for recovering digital data from the incoming analog signals. (Col. 3 lines 31-55)

Regarding claim 26, Shin discloses a method for communicating digital data from a first device to a second device, comprising: receiving incoming analog signals encoded with digital data using a jack; transmitting outgoing analog signals encoded with digital data using the jack; recovering digital data from the incoming analog signals; and encoding digital data into the outgoing analog signals. (Col. 3 lines 31-55)

Regarding claim 27, Shin discloses apparatus for connecting a first device having a first jack with at least one second device having a second jack to allow communication, the apparatus comprising: a non-wireless medium having a first end and a second end; a first plug coupled to

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said first end and configured to connect to the first jack; and a second plug coupled to said second end and configured to connect to the second jack. (Col. 3 lines 31-55)

Regarding claim 28, Shin discloses the apparatus of claim 27, wherein the non-wireless medium comprises a cord configured to carry analog signals as audible analog signals. (Col. 3 lines 31-55)

Regarding claim 29, Shin discloses the apparatus of claim 27, wherein the non-wireless medium comprises a cord configured to carry analog signals electronically. (Col. 3 lines 31-55)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Liu et al (US 2003/0144040 A1) also disclose a mobile apparatus connected by cable via jacks and transmitting and receiving data via audio.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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